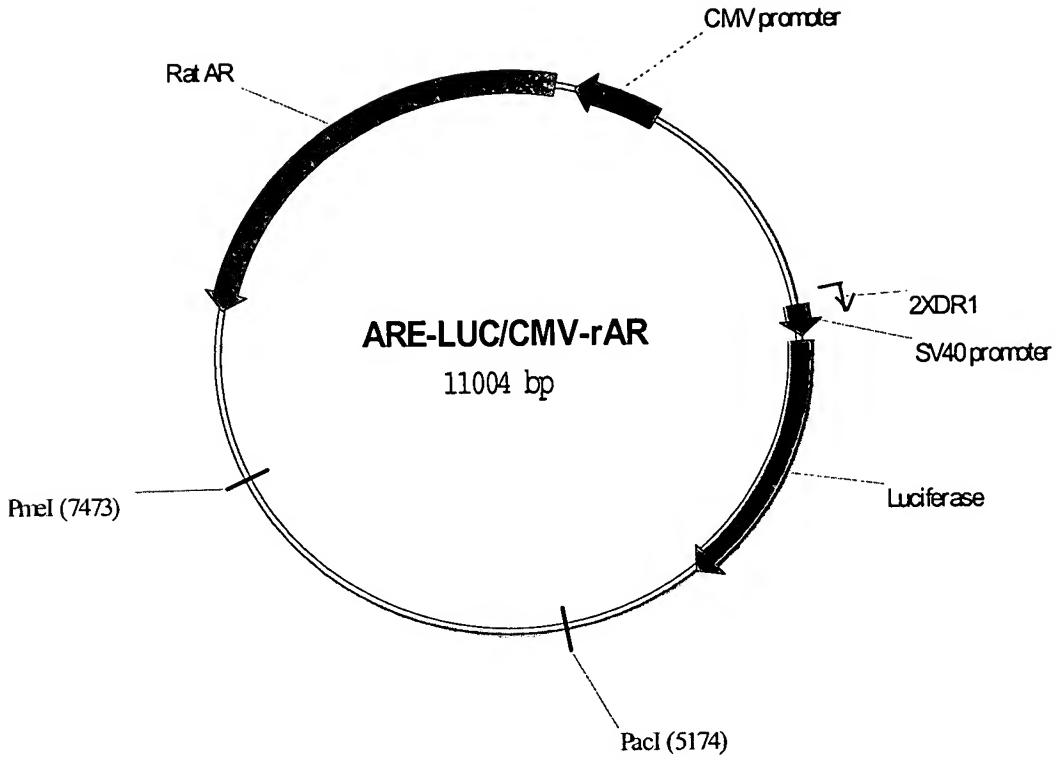
CMV promoter
Rat AR
2XDR1
SV40 promoter
ARE-LUC/CMV-rAR
11004 bp
Luciferase
PmeI (7473)
PacI (5174)

FIG. 1

```
   1 CCAGGGCCAG GTAGCCTGTG GTGCCTCTGA TGTGGGCTTG AGGAGAGCCA TCCTCAGGGT
  61 GCTGCTGCCG CCGCCGCCGC CGGGGGCTAG TCTCCTGCCG CTGCTGTAAA CAGGCACCGG
 121 GAGGTGCTAT GCTAGCGGCC TCAGGGTGCC TGGGGCCCGG GTTCTGGATC GCTTCGCGCA
 181 CGCTCTGGAA CAGATTCTGG AACGCTCCTC GATAGGTCTT GGACGGGGGC CGTGGGTAGA
 241 CCCTTCCCAG CCCTAACTGC ACCTCCATCC TAATCGAATT CCCGCGGCCG GGAAGCTAGC
 301 TAGGATCCAA GAATTCGGGG CCGCGGAGGC TGGATCGGTC CCGGTGTCTT CTATGGAGGT
 361 CAAAACAGCG TGGATGGCGT CTCCAGGCGA TCTGACGGTT CACTAAACGA GCTCTGCTTA
 421 TATAGACCTC CCACCGTACA CGCCTACCGC CCATTTGCGT CAATGGGGCG GAGTTGTTAC
 481 GACATTTTGG AAAGTCCCGT TGATTTTGGT GCCAAAACAA ACTCCCATTG ACGTCAATGG
 541 GGTGGAGACT TGGAAATCCC CGTGAGTCAA ACCGCTATCC ACGCCCATTG ATGTACTGCC
 601 AAAACCGCAT CACCATGGTA ATAGCGATGA CTAATACGTA GATGTACTGC CAAGTAGGAA
 661 AGTCCCATAA GGTCATGTAC TGGGCATAAT GCCAGGCGGG CCATTTACCG TCATTGACGT
 721 CAATAGGGGG CGTACTTGGC ATATGATACA CTTGATGTAC TGCCAAGTGG GCAGTTTACC
 781 GTAAATACTC CACCCATTGA CGTCAATGGA AAGTCCCTAT TGGCGTTACT ATGGGAACAT
 841 ACGTCATTAT TGACGTCAAT GGGCGGGGGT CGTTGGGCGG TCAGCCAGGC GGGCCATTTA
 901 CCGTAAGTTA TGTAACGCGG AACTCCATAT ATGGGCTATG AACTAATGAC CCCGTAATTG
 961 ATTACTATTA ATAACTAGTC AATAATCAAT GTCAACATGG CGGTAATGTT GGACATGAGC
1021 CAATATAAAT GTACATATTA TGATATGGAT ACAACGTATG CAATGGGCCA AGCTCCTCGA
1081 GAATCGCGAG GTACAGCTGC CACCGTTGTT TCCACCGAAG AAACCACCGT TGCCGTAACC
1141 ACCACGACGG TTGTTGCTAA AGAAGCTGCC ACCGCCACGG CCACCGTTGT AGCCGCCGTT
1201 GTTGTTATTG TAGTTGCTAC TGTTATTTCT GGCACTTCTT GGTTTTCCTC TTAAGTGAGG
1261 AGGAACATAA CCATTCTCGT TGTTGTCGTT GATGCTTAAA TTTTGCACTT GTTCGCTCAG
1321 TTCAGCCATA ATATGAAATG CTTTTCTTGT TGTTCTTACG GAATACCACT TGCCACCTAT
1381 CACCACAACT AACTTTTTCC CGTTCCTCCA TCTCTTTTAT ATTTTTTTTC TCGACTTTTA
1441 TATTTTTTTT ATCGAGGGAT CTTTGTGAAG GAACCTTACT TCTGTGGTGT GACATAATTG
1501 GACAAACTAC CTACAGAGAT TTAAAGCTCT AAGGTAAATA TAAAATTTTT AAGTGTATAA
1561 TGTGTTAAAC TACTGATTCT AATTGTTTGT GTATTTTAGA TTCCAACCTA TGGAACTGAT
1621 GAATGGGAGC AGTGGTGGAA TGCCTTTAAT GAGGAAAACC TGTTTTGCTC AGAAGAAATG
1681 CCATCTAGTG ATGATGAGGC TACTGCTGAC TCTCAACATT CTACTCCTCC AAAAAAGAAG
1741 AGAAAGGTAG AAGACCCCAA GGACTTTCCT TCAGAATTGC TAAGTTTTTT GAGTCATGCT
1801 GTGTTTAGTA ATAGAACTCT TGCTTGCTTT GCTATTTACA CCACAAAGGA AAAAGCTGCA
1861 CTGCTATACA AGAAAATTAT GGAAAAATAT TCTGTAACCT TTATAAGTAG GCATAACAGT
1921 TATAATCATA ACATACTGTT TTTTCTTACT CCACACAGGC ATAGAGTGTC TGCTATTAAT
1981 AACTATGCTC AAAAATTGTG TACCTTTAGC TTTTTAATTT GTAAAGGGGT TAATAAGGAA
2041 TATTTGATGT ATAGTGCCTT GACTAGAGAT CATAATCAGC CATACCACAT TTGTAGAGGT
2101 TTTACTTGCT TTAAAAAACC TCCCACACCT CCCCCTGAAC CTGAAACATA AAATGAATGC
2161 AATTGTTGTT GTTAACTTGT TTATTGCAGC TTATAATGGT TACAAATAAA GCAATAGCAT
2221 CACAAATTTC ACAAATAAAG CATTTTTTTC ACTGCATTCT AGTTGTGGTT TGTCCAAACT
2281 CATCAATGTA TCTTATCATG TCTGGATCTG ACATGGTAAG TAAGCTCGAC GCGGCCGATC
2341 TTAGATCTCG TCCTGAAGGA ACGGAACAGA CTGATCGAGT CCTGAAGGAA CGGAACAGAC
2401 TGATCGAGAT CTGCGATCTG CATCTCAATT AGTCAGCAAC CATAGTCCCG CCCCTAACTC
2461 CGCCCATCCC GCCCCTAACT CCGCCCAGTT CCGCCCATTC TCCGCCCCAT CGCTGACTAA
2521 TTTTTTTTAT TTATGCAGAG GCCGAGGCCG CCTCGGCCTC TGAGCTATTC CAGAAGTAGT
2581 GAGGAGGCTT TTTTGGAGGC CTAGGCTTTT GCAAAAAGCT TGGCATTCCG GTACTGTTGG
2641 TAAAGCCACC ATGGAAGACG CCAAAAACAT AAAGAAAGGC CCGGCGCCAT TCTATCCGCT
2701 GGAAGATGGA ACCGCTGGAG AGCAACTGCA TAAGGCTATG AAGAGATACG CCCTGGTTCC
2761 TGGAACAATT GCTTTTACAG ATGCACATAT CGAGGTGGAC ATCACTTACG CTGAGTACTT
2821 CGAAATGTCC GTTCGGTTGG CAGAAGCTAT GAAACGATAT GGGCTGAATA CAAATCACAG
2881 AATCGTCGTA TGCAGTGAAA ACTCTCTTCA ATTCTTTATG CCGGTGTTGG GCGCGTTATT
2941 TATCGGAGTT GCAGTTGCGC CCGCGAACGA CATTTATAAT GAACGTGAAT TGCTCAACAG
3001 TATGGGCATT TCGCAGCCTA CCGTGGTGTT CGTTTCCAAA AAGGGGTTGC AAAAAATTTT
3061 GAACGTGCAA AAAAAGCTCC CAATCATCCA AAAAATTATT ATCATGGATT CTAAAACGGA
3121 TTACCAGGGA TTTCAGTCGA TGTACACGTT CGTCACATCT CATCTACCTC CCGGTTTTAA
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FIG. 2A

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3181 TGAATACGAT TTTGTGCCAG AGTCCTTCGA TAGGGACAAG ACAATTGCAC TGATCATGAA
3241 CTCCTCTGGA TCTACTGGTC TGCCTAAAGG TGTCGCTCTG CCTCATAGAA CTGCCTGCGT
3301 GAGATTCTCG CATGCCAGAG ATCCTATTTT TGGCAATCAA ATCATTCCGG ATACTGCGAT
3361 TTTAAGTGTT GTTCCATTCC ATCACGGTTT TGGAATGTTT ACTACACTCG GATATTTGAT
3421 ATGTGGATTT CGAGTCGTCT TAATGTATAG ATTTGAAGAA GAGCTGTTTC TGAGGAGCCT
3481 TCAGGATTAC AAGATTCAAA GTGCGCTGCT GGTGCCAACC CTATTCTCCT TCTTCGCCAA
3541 AAGCACTCTG ATTGACAAAT ACGATTTATC TAATTTACAC GAAATTGCTT CTGGTGGCGC
3601 TCCCCTCTCT AAGGAAGTCG GGGAAGCGGT TGCCAAGAGG TTCCATCTGC CAGGTATCAG
3661 GCAAGGATAT GGGCTCACTG AGACTACATC AGCTATTCTG ATTACACCCG AGGGGGATGA
3721 TAAACCGGGC GCGGTCGGTA AAGTTGTTCC ATTTTTTGAA GCGAAGGTTG TGGATCTGGA
3781 TACCGGGAAA ACGCTGGGCG TTAATCAAAG AGGCGAACTG TGTGTGAGAG GTCCTATGAT
3841 TATGTCCGGT TATGTAAACA ATCCGGAAGC GACCAACGCC TTGATTGACA AGGATGGATG
3901 GCTACATTCT GGAGACATAG CTTACTGGGA CGAAGACGAA CACTTCTTCA TCGTTGACCG
3961 CCTGAAGTCT CTGATTAAGT ACAAAGGCTA TCAGGTGGCT CCCGCTGAAT TGGAATCCAT
4021 CTTGCTCCAA CACCCCAACA TCTTCGACGC AGGTGTCGCA GGTCTTCCCG ACGATGACGC
4081 CGGTGAACTT CCCGCCGCCG TTGTTGTTTT GGAGCACGGA AAGACGATGA CGGAAAAAGA
4141 GATCGTGGAT TACGTCGCCA GTCAAGTAAC AACCGCGAAA AAGTTGCGCG GAGGAGTTGT
4201 GTTTGTGGAC GAAGTACCGA AAGGTCTTAC CGGAAAACTC GACGCAAGAA AAATCAGAGA
4261 GATCCTCATA AAGGCCAAGA AGGGCGGAAA GATCGCCGTG TAATTCTAGA GCTGAGAACT
4321 TCAGGGTGAG TTTGGGGACC CTTGATTGTT CTTTCTTTTT CGCTATTGTA AAATTCATGT
4381 TATATGGAGG GGGCAAAGTT TTCAGGGTGT TGTTTAGAAT GGGAAGATGT CCCTTGTATC
4441 ACCATGGACC CTCATGATAA TTTTGTTTCT TTCACTTTCT ACTCTGTTGA CAACCATTGT
4501 CTCCTCTTAT TTTCTTTTCA TTTTCTGTAA CTTTTTCGTT AAACTTTAGC TTGCATTTGT
4561 AACGAATTTT TAAATTCACT TTTGTTTATT TGTCAGATTG TAAGTACTTT CTCTAATCAC
4621 TTTTTTTTCA AGGCAATCAG GGTATATTAT ATTGTACTTC AGCACAGTTT TAGAGAACAA
4681 TTGTTATAAT TAAATGATAA GGTAGAATAT TTCTGCATAT AAATTCTGGC TGGCGTGGAA
4741 ATATTCTTAT TGGTAGAAAC AACTACACCC TGGTCATCAT CCTGCCTTTC TCTTTATGGT
4801 TACAATGATA TACACTGTTT GAGATGAGGA TAAAATACTC TGAGTCCAAA CCGGGCCCCT
4861 CTGCTAACCA TGTTCATGCC TTCTTCTCTT TCCTACAGCT CCTGGGCAAC GTGCTGGTTG
4921 TTGTGCTGTC TCATCATTTT GGCAAAGAAT TAATTCACTC CTCAGGTGCA GGCTGCCTAT
4981 CAGAAGGTGG TGGCTGGTGT GGCCAATGCC CTGGCTCACA AATACCACTG AGATCGATCT
5041 TTTTCCCTCT GCCAAAAATT ATGGGGACAT CATGAAGCCC CTTGAGCATC TGACTTCTGG
5101 CTAATAAAGG AAATTTATTT TCATTGCAAT AGTGTGTTGG AATTTTTTGT GTCTCTCACT
5161 CGGAAGGATT AATTAAGGCC GCCCTATTTT TATAGGTTAA TGTCATGATA ATAATGGTTT
5221 CTTAGACGTC AGGTGGCACT TTTCGGGGAA ATGTGCGCGG AACCCCTATT TGTTTATTTT
5281 TCTAAATACA TTCAAATATG TATCCGCTCA TGAGACAATA ACCCTGATAA ATGCTTCAAT
5341 AATATTGAAA AAGGAAGAGT ATGAGTATTC AACATTTCCG TGTCGCCCTT ATTCCCTTTT
5401 TTGCGGCATT TTGCCTTCCT GTTTTTGCTC ACCCAGAAAC GCTGGTGAAA GTAAAAGATG
5461 CTGAAGATCA GTTGGGTGCA CGAGTGGGTT ACATCGAACT GGATCTCAAC AGCGGTAAGA
5521 TCCTTGAGAG TTTTCGCCCC GAAGAACGTT TTCCAATGAT GAGCACTTTT AAAGTTCTGC
5581 TATGTGGCGC GGTATTATCC CGTGTTGACG CCGGGCAAGA GCAACTCGGT CGCCGCATAC
5641 ACTATTCTCA GAATGACTTG GTTGAGTACT CACCAGTCAC AGAAAAGCAT CTTACGGATG
5701 GCATGACAGT AAGAGAATTA TGCAGTGCTG CCATAACCAT GAGTGATAAC ACTGCGGCCA
5761 ACTTACTTCT GACAACGATC GGAGGACCGA AGGAGCTAAC CGCTTTTTTG CACAACATGG
5821 GGGATCATGT AACTCGCCTT GATCGTTGGG AACCGGAGCT GAATGAAGCC ATACCAAACG
5881 ACGAGCGTGA CACCACGATG CCTGTAGCAA TGGCAACAAC GTTGCGCAAA CTATTAACTG
5941 GCGAACTACT TACTCTAGCT TCCCGGCAAC AATTAATAGA CTGGATGGAG GCGGATAAAG
6001 TTGCAGGACC ACTTCTGCGC TCGGCCCTTC CGGCTGGCTG GTTTATTGCT GATAAATCTG
6061 GAGCCGGTGA GCGTGGGTCT CGCGGTATCA TTGCAGCACT GGGGCCAGAT GGTAAGCCCT
6121 CCCGTATCGT AGTTATCTAC ACGACGGGGA GTCAGGCAAC TATGGATGAA CGAAATAGAC
6181 AGATCGCTGA GATAGGTGCC TCACTGATTA AGCATTGGTA ACTGTCAGAC CAAGTTTACT
6241 CATATATACT TTAGATTGAT TTAAAACTTC ATTTTTAATT TAAAAGGATC TAGGTGAAGA
6301 TCCTTTTTGA TAATCTCATG ACCAAAATCC CTTAACGTGA GTTTTCGTTC CACTGAGCGT
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FIG. 2B

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6361 CAGACCCCGT AGAAAAGATC AAAGGATCTT CTTGAGATCC TTTTTTTCTG CGCGTAATCT
6421 GCTGCTTGCA AACAAAAAAA CCACCGCTAC CAGCGGTGGT TTGTTTGCCG GATCAAGAGC
6481 TACCAACTCT TTTTCCGAAG GTAACTGGCT TCAGCAGAGC GCAGATACCA AATACTGTTC
6541 TTCTAGTGTA GCCGTAGTTA GGCCACCACT TCAAGAACTC TGTAGCACCG CCTACATACC
6601 TCGCTCTGCT AATCCTGTTA CCAGTGGCTG CTGCCAGTGG CGATAAGTCG TGTCTTACCG
6661 GGTTGGACTC AAGACGATAG TTACCGGATA AGGCGCAGCG GTCGGGCTGA ACGGGGGGTT
6721 CGTGCACACA GCCCAGCTTG GAGCGAACGA CCTACACCGA ACTGAGATAC CTACAGCGTG
6781 AGCTATGAGA AAGCGCCACG CTTCCCGAAG GGAGAAAGGC GGACAGGTAT CCGGTAAGCG
6841 GCAGGGTCGG AACAGGAGAG CGCACGAGGG AGCTTCCAGG GGGAAACGCC TGGTATCTTT
6901 ATAGTCCTGT CGGGTTTCGC CACCTCTGAC TTGAGCGTCG ATTTTTGTGA TGCTCGTCAG
6961 GGGGGCGGAG CCTATGGAAA AACGCCAGCA ACGCGGCCTT TTTACGGTTC CTGGCCTTTT
7021 GCTGGCCTTT TGCTCACATG TTCTTTCCTG CGTTATCCCC TGATTCTGTG GATAACCGTA
7081 TTACCGCCTT TGAGTGAGCT GATACCGCTC GCCGCAGCCG AACGACCGAG CGCAGCGAGT
7141 CAGTGAGCGA GGAAGCGGAA GAGCGCCCAA TACGCAAACC GCCTCTCCCC GCGCGTTGGC
7201 CGATTCATTA ATGCAGCTGA ACGGTCTGGT TATAGGTACA TTGAGCAACT GACTGAAATG
7261 CCTCAAAATG TTCTTTACGA TGCCATTGGG ATATATCAAC GGTGGTATAT CCAGTGATTT
7321 TTTTCTCCAT TTTAGCTTCC TTAGCTCCTG AAAATCTCGC CAAGCTTGGT CGAGCTGGAT
7381 ACTTCCCGTC CGCCAGGGGG ACATGCCGGC GATGCTGAAG GTCGCGCGCA TTCCCGATGA
7441 AGAGGCCGGT AACAGAGCTC GGCGCGCCGT TTAAACCAGA CATAAGATAC ATTGATGAGT
7501 TTGGACAAAC CACAACTAGA ATGCAGTGAA AAAAATGCTT TATTTGTGAA ATTTGTGATG
7561 CTATTGCTTT ATTTGTAACC ATTATAAGCG GCAATAAACA AGTTAACAAC AACAATTGCA
7621 TTCATTTTAT GTTTCAGGTT CAGGGGGAGG TGTGGGAGGT TTTTTAAAGC AAGTAAAACC
7681 TCTACAAATG TGGTATGGCT GATTATGATC TCTAGTCAAG GCACTATACA TCAAATATTC
7741 CTTATTAACC CCTTTACAAA TTAAAAAGCT AAAGGTACAC AATTTTTGAG CATAGTTATT
7801 AATAGCAGAC ACTCTATGCC TGTGTGGAGT AAGAAAAAAC AGTATGTTCT GATTATAACT
7861 GTTATGCCTA CTTATAAAGG TTACAGAATA TTTTTCCATA ATTTTCTTGT ATAGCAGTGC
7921 AGCTTTTTCC TTTGTGGTGT AAATAGCAAA GCAAGCAAGA GTTCTATTAC TAAACACAGC
7981 ATGACTCAAA AAACTTAGCA ATTCTGAAGG AAAGTCCTTG GGGTCTTCTA CCTTTCTCTT
8041 CTTTTTTGGA GGAGTAGAAT GTTGAGAGTC AGCAGTAGCC TCATCATCAC TAGATGGCAT
8101 TTCTTCTGAG CAAAACAGGT TTTCCTCATT AAAGGCATTC CACCACTGCT CCCATTCATC
8161 AGTTCCATAG GTTGGAATCT AAAATACACA AACAATTAGA ATCAGTAGTT TAACACATTA
8221 TACACTTAAA AATTTTATAT TTACCTTAGA GCTTTAAATC TCTGTAGGTA GTTTGTCCAA
8281 TTATGTCACA CCACAGAAGT AAGGTTCCTT CACAAAGATC CTCTGTACAT CAAGATCCGC
8341 TTTCACATTT CAGCTGTTTT TCCAGTCCGC AGATGATCAG TTCCAGGCCG AACAGGAAGG
8401 CTGGCTCTGC ACCCTGGTGA TCAAACAGTT CGATAGCCTG GCGCAGCAGA GGAGGCATGC
8461 TATCAGTAGT AGGTGTTTCC CTTTCTTCTT TAGCGACCTG ATGCTCCTGA TCTTCCAGCA
8521 CGCAACCCAG AGTAAAATGT CCCACAGCGG CCGCGGGAAT TCGATTTCAC TGTGTGTGGA
8581 AATAGATGGG CTTGACTTTC CCAGAAAGGA TCTTGGGCAC TTGCACAGAG ATGATCTCTG
8641 CCATCATTTC AGGAAAGTCC ACGCTCACCA TATGGGACTT GATTAGCAGG TCAAAAGTGA
8701 ATTGATGCAG CTCTCTTGCA ATAGGCTGCA CAGAATCCAG GAGCTTGGTG AGCTGGTAGA
8761 AGCGCCTTGA GCAGGATGTG GGATTTTTTC TTTTGCATGC AATGATGCGA TCAAGTTCCT
8821 TGATGTAGTT CATTCGAAGT TCATCAAAGA ATTTTTGATT TTTCAGCCCA TCCACTGGAA
8881 TAATGCTGAA GAGTAGCAGT GCTTTCATGC ACAGGAATTC CTGGGGGGTT ATCTGGAGCC
8941 ATCCAAACTC TTGAGAAAGG TGCCTCATCC TCACGCACTG GCTGTACATT CGAGACTTGT
9001 GCATGCGATA CTCATTGAAA ACCAGGTCAG GTGCAAAGTA GAGCATCCTA GAGTTGACAT
9061 TAGTGAAGGA CCGCCAACCC ATGGCAAATA CCATCAGTCC CATCCAGGAA TACTGAATGA
9121 CTGCCATCTG GTCATCCACA TGCAAGTTGC GGAAGCCAGG CAAGGCCTTG GCCCACTTGA
9181 CCACATGTAC AAGCTGTCTC TCGCCAAGCT CGTTGAGACT AGATAACAAG GCAGCAAAGG
9241 AATCAGGCTG GTTGTTGTCA TGTCCGGCAC ACACCACTCC TGGCTCAATG GCTTCCAGGA
9301 CATTAAGAAA GATAGGTTGA CATTCATAGC CTTCAATGTG TGATACAGTC ATCTTCTGGG
9361 ATGGGTCCTC AGTGGGGCTA CCAGCACTGG AGTTTTCTCC TTCTTCCTGT AGTTTGAGAT
9421 TTCCAAGTTT CTTCAGCTTA CGAGCTCCCA GAGTCATCCC TGCTTCATAA CATTTCCGGA
9481 GACGACACGA TGGACAATTT TTCCTCCGAA ATTTATCAAT GGTGCAATCA TTTCTGCTGG
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FIG. 2C

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 9541 CACATAGATA CTTCTGTTTC CCTTCCGCAG CTCTTTTGAA GAAGACCTTG CAGCTGCCAC
 9601 AAGTGAGAGC TCCGTAGTGA CAACCAGAAG CTTCATCTCC ACAGATCAGG CAGGTCTTCT
 9661 GGGGTGGGAA GTAATAGTCG ATGGGTAAAA CGTGGTCCCT GGTACTGTCC AAACGCATGT
 9721 CCCCATAAGG TCCGGAGTAG TTCTCCATCC AAGGTCCCAT TTCACTTTTA ACACAACTGG
 9781 GACTGGGATA GGGGACTCTG TTCACAACTC CGCCAGGATA CCACACTTCA GAGGCAGAGA
 9841 AGTCACCCTC CTGGCTTGCC AGCCCCTGAG GGGGCCGAGT GTAGCCATAG GGGGCTACAG
 9901 GCCCAGCATC GCTTGGGCTA CTGCTGCCGC CCCCGCCTCC TGGCCCATAT AATTGGCCTT
 9961 CTTCAGCTGT GAAGAGAGTA TGCCAGGAAG AAGAGGCGGT GGCTGGGGGC GATCCAGTGC
10021 TGGGTCCGGC TACACTCCCT CCATGTAGGC TAGCCAAGTC CCCATAGCGG CATTGCGCTG
10081 CCGCCGCAGC CCAGGCGCTG CCGTAGTCCA ACGGGTTCTC CAGCTTGATG CGGGCGTGTG
10141 GATGGGTAGG GGGCGGGGGG TGCGGCGGCC CGGACAGAGC GAGCGGAAAG TTGTAGTAGT
10201 CGCGATTCTG GTATGCTGCT GCCTCGTCTA CTGCTCCAGA CTTATACAGA GACAGTGAGG
10261 ACGGGATCTC AAGTGTCCCA GAGCTACCTG CTTCACTGCT GCCAGAGCAG CCCAGACTCT
10321 CACCTTCCAA CCCTTTGGCG TAACCTCCCT TGAAAGAGGA ATACTCAGCA GTCTCTTCAG
10381 TGCCTTTGCC CGGGCCTTCG TCCAGGGAAA GACCTTTGCA TTCGGCCAGA GGCGCACAAG
10441 GAGTGGGACG CACGGCGGGT GGACCTCCCA GGAGCGACGC GTACATGCAG TCGCCCCGAA
10501 GCTGCTCCCC TGGACTCAGA TGTTCCAGTG CTTCCACACC CAACCCCATG GACACAGACA
10561 CTGCTTTACA CAACTCCTTG GCACTGTCAG ATATGGTCGA ATTGCCCCCT AGGTAACTAT
10621 CCTTGGAGGA AGAGGGAGCC CCAGTGGCCT CCCTTGCTCT CACGCTGCTG CTGCCTTCGG
10681 ATATTACCTC CTGCTGCTGT TGCTGCTGCT GCTGCTGCTG CTGCTGCTGC TGTTGCTGTT
10741 GCTGCTGCTG CTGAAGAAGT TGCATGGTGC CGGCCTCGCT CAGGATGTCT TTAATGTCTG
10801 CGGAGCAGCT GCTTAAGCCT GGGAAAGTGG GGCCCAGTAG GGACAACGTG GATGGGGCAG
10861 CTGAGTCATC CTGATCTGGA GGAGCTGGTG GCTGCTGCGG CAGCCCCTTG CCAGGAGCCG
10921 TGGCAGCTCC AGGCTCCGGG AGGCAAAAAC TCTCAGGGTG GCCCTCGGAG GCTGACTGCT
10981 GCTGTGAAGG CTGCTGTTCC TCCT
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FIG. 2D

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2641            ATGGAAGACG CCAAAAACAT AAAGAAAGGC CCGGCGCCAT TCTATCCGCT
2701 GGAAGATGGA ACCGCTGGAG AGCAACTGCA TAAGGCTATG AAGAGATACG CCCTGGTTCC
2761 TGGAACAATT GCTTTTACAG ATGCACATAT CGAGGTGGAC ATCACTTACG CTGAGTACTT
2821 CGAAATGTCC GTTCGGTTGG CAGAAGCTAT GAAACGATAT GGGCTGAATA CAAATCACAG
2881 AATCGTCGTA TGCAGTGAAA ACTCTCTTCA ATTCTTTATG CCGGTGTTGG GCGCGTTATT
2941 TATCGGAGTT GCAGTTGCGC CCGCGAACGA CATTTATAAT GAACGTGAAT TGCTCAACAG
3001 TATGGGCATT TCGCAGCCTA CCGTGGTGTT CGTTTCCAAA AAGGGGTTGC AAAAAATTTT
3061 GAACGTGCAA AAAAAGCTCC CAATCATCCA AAAAATTATT ATCATGGATT CTAAAACGGA
3121 TTACCAGGGA TTTCAGTCGA TGTACACGTT CGTCACATCT CATCTACCTC CCGGTTTTAA
3181 TGAATACGAT TTTGTGCCAG AGTCCTTCGA TAGGGACAAG ACAATTGCAC TGATCATGAA
3241 CTCCTCTGGA TCTACTGGTC TGCCTAAAGG TGTCGCTCTG CCTCATAGAA CTGCCTGCGT
3301 GAGATTCTCG CATGCCAGAG ATCCTATTTT TGGCAATCAA ATCATTCCGG ATACTGCGAT
3361 TTTAAGTGTT GTTCCATTCC ATCACGGTTT TGGAATGTTT ACTACACTCG GATATTTGAT
3421 ATGTGGATTT CGAGTCGTCT TAATGTATAG ATTTGAAGAA GAGCTGTTTC TGAGGAGCCT
3481 TCAGGATTAC AAGATTCAAA GTGCGCTGCT GGTGCCAACC CTATTCTCCT TCTTCGCCAA
3541 AAGCACTCTG ATTGACAAAT ACGATTTATC TAATTTACAC GAAATTGCTT CTGGTGGCGC
3601 TCCCCTCTCT AAGGAAGTCG GGGAAGCGGT TGCCAAGAGG TTCCATCTGC CAGGTATCAG
3661 GCAAGGATAT GGGCTCACTG AGACTACATC AGCTATTCTG ATTACACCCG AGGGGGATGA
3721 TAAACCGGGC GCGGTCGGTA AAGTTGTTCC ATTTTTTGAA GCGAAGGTTG TGGATCTGGA
3781 TACCGGGAAA ACGCTGGGCG TTAATCAAAG AGGCGAACTG TGTGTGAGAG GTCCTATGAT
3841 TATGTCCGGT TATGTAAACA ATCCGGAAGC GACCAACGCC TTGATTGACA AGGATGGATG
3901 GCTACATTCT GGAGACATAG CTTACTGGGA CGAAGACGAA CACTTCTTCA TCGTTGACCG
3961 CCTGAAGTCT CTGATTAAGT ACAAAGGCTA TCAGGTGGCT CCCGCTGAAT TGGAATCCAT
4021 CTTGCTCCAA CACCCCAACA TCTTCGACGC AGGTGTCGCA GGTCTTCCCG ACGATGACGC
4081 CGGTGAACTT CCCGCCGCCG TTGTTGTTTT GGAGCACGGA AAGACGATGA CGGAAAAAGA
4141 GATCGTGGAT TACGTCGCCA GTCAAGTAAC AACCGCGAAA AAGTTGCGCG GAGGAGTTGT
4201 GTTTGTGGAC GAAGTACCGA AAGGTCTTAC CGGAAAACTC GACGCAAGAA AAATCAGAGA
4261 GATCCTCATA AAGGCCAAGA AGGGCGGAAA GATCGCCGTG TAA
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FIG. 3

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2341    GATCTCG TCCTGAAGGA ACGGAACAGA CTGATCGAGT CCTGAAGGAA CGGAACAGAC
2401 TGATCGAGAT CTGCGATCTG CATCTCAATT AGTCAGCAAC CATAGTCCCG CCCCTAACTC
2461 CGCCCATCCC GCCCCTAACT CCGCCCAGTT CCGCCCATTC TCCGCCCCAT CGCTGACTAA
2521 TTTTTTTTAT TTATGCAGAG GCCGAGGCCG CCTCGGCCTC TGAGCTATTC CAGAAGTAGT
2581 GAGGAGGCTT TTTTGGAGGC CTAGGCTTTT GCAAA
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FIG. 4

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  268 ATGGAGGTGC AGTTAGGGCT GGGAAGGGTC TACCCACGGC CCCCGTCCAA GACCTATCGA
  208 GGAGCGTTCC AGAATCTGTT CCAGAGCGTG CGCGAAGCGA TCCAGAACCC GGGCCCCAGG
  148 CACCCTGAGG CCGCTAGCAT AGCACCTCCC GGTGCCTGTT TACAGCAGCG GCAGGAGACT
   88 AGCCCCCGGC GGCGGCGGCG GCAGCAGCAC CCTGAGGATG GCTCTCCTCA AGCCCACATC
   28 AGAGGCACCA CAGGCTACCT GGCCCTGGAG GAGGAACAGC AGCCTTCACA GCAGCAGTCA
10972 GCCTCCGAGG GCCACCCTGA GAGTTTTTGC CTCCCGGAGC CTGGAGCTGC CACGGCTCCT
10912 GGCAAGGGGC TGCCGCAGCA GCCACCAGCT CCTCCAGATC AGGATGACTC AGCTGCCCCA
10852 TCCACGTTGT CCCTACTGGG CCCCACTTTC CCAGGCTTAA GCAGCTGCTC CGCAGACATT
10792 AAAGACATCC TGAGCGAGGC CGGCACCATG CAACTTCTTC AGCAGCAGCA GCAACAGCAA
10732 CAGCAGCAGC AGCAGCAGCA GCAGCAGCAG CAACAGCAGC AGGAGGTAAT ATCCGAAGGC
10672 AGCAGCAGCG TGAGAGCAAG GGAGGCCACT GGGGCTCCCT CTTCCTCCAA GGATAGTTAC
10612 CTAGGGGGCA ATTCGACCAT ATCTGACAGT GCCAAGGAGT TGTGTAAAGC AGTGTCTGTG
10552 TCCATGGGGT TGGGTGTGGA AGCACTGGAA CATCTGAGTC CAGGGGAGCA GCTTCGGGGC
10492 GACTGCATGT ACGCGTCGCT CCTGGGAGGT CCACCCGCCG TGCGTCCCAC TCCTTGTGCG
10432 CCTCTGGCCG AATGCAAAGG TCTTTCCCTG GACGAAGGCC CGGGCAAAGG CACTGAAGAG
10372 ACTGCTGAGT ATTCCTCTTT CAAGGGAGGT TACGCCAAAG GGTTGGAAGG TGAGAGTCTG
10312 GGCTGCTCTG GCAGCAGTGA AGCAGGTAGC TCTGGGACAC TTGAGATCCC GTCCTCACTG
10252 TCTCTGTATA AGTCTGGAGC AGTAGACGAG GCAGCAGCAT ACCAGAATCG CGACTACTAC
10192 AACTTTCCGC TCGCTCTGTC CGGGCCGCCG CACCCCCCGC CCCCTACCCA TCCACACGCC
10132 CGCATCAAGC TGGAGAACCC GTTGGACTAC GGCAGCGCCT GGGCTGCGGC GGCAGCGCAA
10072 TGCCGCTATG GGGACTTGGC TAGCCTACAT GGAGGGAGTG TAGCCGGACC CAGCACTGGA
10012 TCGCCCCCAG CCACCGCCTC TTCTTCCTGG CATACTCTCT TCACAGCTGA AGAAGGCCAA
 9952 TTATATGGGC CAGGAGGCGG GGGCGGCAGC AGTAGCCCAA GCGATGCTGG GCCTGTAGCC
 9892 CCCTATGGCT ACACTCGGCC CCCTCAGGGG CTGGCAAGCC AGGAGGGTGA CTTCTCTGCC
 9832 TCTGAAGTGT GGTATCCTGG CGGAGTTGTG AACAGAGTCC CCTATCCCAG TCCCAGTTGT
 9772 GTTAAAAGTG AAATGGGACC TTGGATGGAG AACTACTCCG GACCTTATGG GGACATGCGT
 9712 TTGGACAGTA CCAGGGACCA CGTTTTACCC ATCGACTATT ACTTCCCACC CCAGAAGACC
 9652 TGCCTGATCT GTGGAGATGA AGCTTCTGGT TGTCACTACG GAGCTCTCAC TTGTGGCAGC
 9592 TGCAAGGTCT TCTTCAAAAG AGCTGCGGAA GGGAAACAGA AGTATCTATG TGCCAGCAGA
 9532 AATGATTGCA CCATTGATAA ATTTCGGAGG AAAAATTGTC CATCGTGTCG TCTCCGGAAA
 9472 TGTTATGAAG CAGGGATGAC TCTGGGAGCT CGTAAGCTGA AGAAACTTGG AAATCTCAAA
 9412 CTACAGGAAG AAGGAGAAAA CTCCAGTGCT GGTAGCCCCA CTGAGGACCC ATCCCAGAAG
 9352 ATGACTGTAT CACACATTGA AGGCTATGAA TGTCAACCTA TCTTTCTTAA TGTCCTGGAA
 9292 GCCATTGAGC CAGGAGTGGT GTGTGCCGGA CATGACAACA ACCAGCCTGA TTCCTTTGCT
 9232 GCCTTGTTAT CTAGTCTCAA CGAGCTTGGC GAGAGACAGC TTGTACATGT GGTCAAGTGG
 9172 GCCAAGGCCT TGCCTGGCTT CCGCAACTTG CATGTGGATG ACCAGATGGC AGTCATTCAG
 9112 TATTCCTGGA TGGGACTGAT GGTATTTGCC ATGGGTTGGC GGTCCTTCAC TAATGTCAAC
 9052 TCTAGGATGC TCTACTTTGC ACCTGACCTG GTTTTCAATG AGTATCGCAT GCACAAGTCT
 8992 CGAATGTACA GCCAGTGCGT GAGGATGAGG CACCTTTCTC AAGAGTTTGG ATGGCTCCAG
 8932 ATAACCCCCC AGGAATTCCT GTGCATGAAA GCACTGCTAC TCTTCAGCAT TATTCCAGTG
 8872 GATGGGCTGA AAAATCAAAA ATTCTTTGAT GAACTTCGAA TGAACTACAT CAAGGAACTT
 8812 GATCGCATCA TTGCATGCAA AAGAAAAAAT CCCACATCCT GCTCAAGGCG CTTCTACCAG
 8752 CTCACCAAGC TCCTGGATTC TGTGCAGCCT ATTGCAAGAG AGCTGCATCA ATTCACTTTT
 8692 GACCTGCTAA TCAAGTCCCA TATGGTGAGC GTGGACTTTC CTGAAATGAT GGCAGAGATC
 8632 ATCTCTGTGC AAGTGCCCAA GATCCTTTCT GGGAAAGTCA AGCCCATCTA TTTCCACACA
 8572 CAGTGA
```

FIG. 5

```
977 TAGTTATTAA TAGTAATCAA TTACGGGGTC ATTAGTTCAT AGCCCATATA TGGAGTTCCG
917 CGTTACATAA CTTACGGTAA ATGGCCCGCC TGGCTGACCG CCCAACGACC CCCGCCCATT
857 GACGTCAATA ATGACGTATG TTCCCATAGT AACGCCAATA GGGACTTTCC ATTGACGTCA
797 ATGGGTGGAG TATTTACGGT AAACTGCCCA CTTGGCAGTA CATCAAGTGT ATCATATGCC
737 AAGTACGCCC CCTATTGACG TCAATGACGG TAAATGGCCC GCCTGGCATT ATGCCCAGTA
677 CATGACCTTA TGGGACTTTC CTACTTGGCA GTACATCTAC GTATTAGTCA TCGCTATTAC
617 CATGGTGATG CGGTTTTGGC AGTACATCAA TGGGCGTGGA TAGCGGTTTG ACTCACGGGG
557 ATTTCCAAGT CTCCACCCCA TTGACGTCAA TGGGAGTTTG TTTTGGCACC AAAATCAACG
497 GGACTTTCCA AAATGTCGTA ACAACTCCGC CCCATTGACG CAAATGGGCG GTAGGCGTGT
437 ACGGTGGGAG GTCTATATAA GCAGAGCTGG TTTAGTGAAC CGTCAGATC
```

FIG. 6

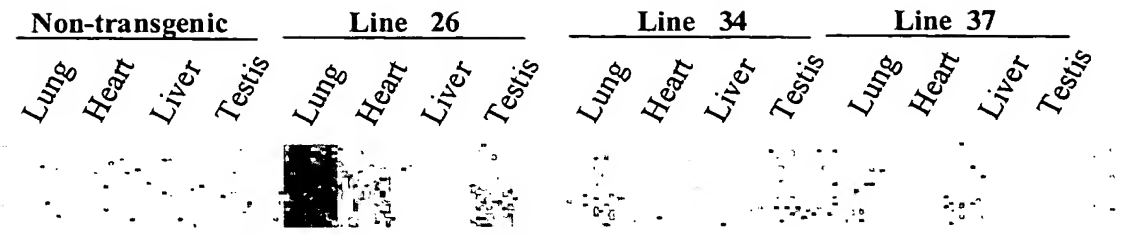

Non-transgenic
Line 26
Line 34
Line 37
Lung
Heart
Liver
Testis
Lung
Heart
Liver
Testis
Lung
Heart
Liver
Testis
Lung
Heart
Liver
Testis

FIG. 7

FIG. 8A

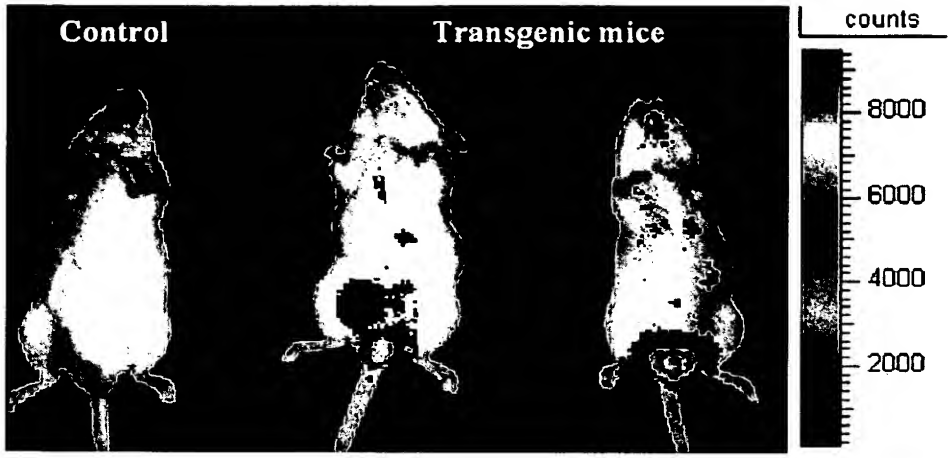
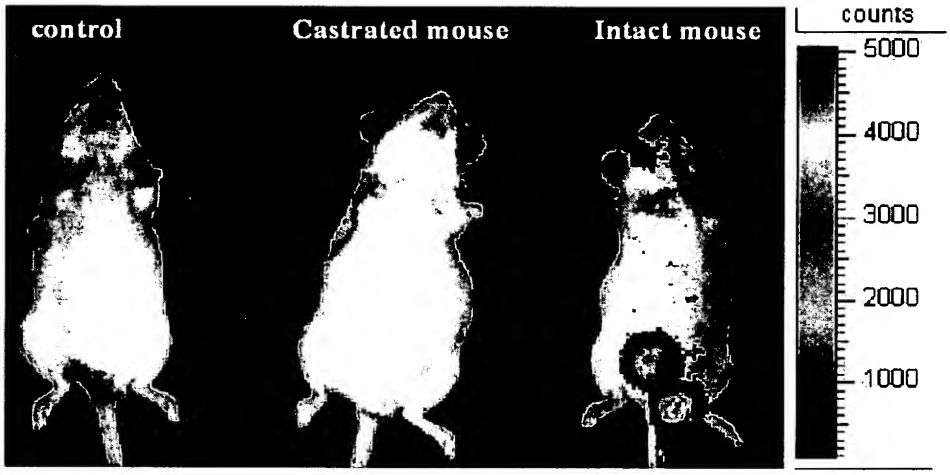

Control
Transgenic mice
counts
8000
6000
4000
2000

FIG. 8B


control
Castrated mouse
Intact mouse
counts
5000
4000
3000
2000
1000

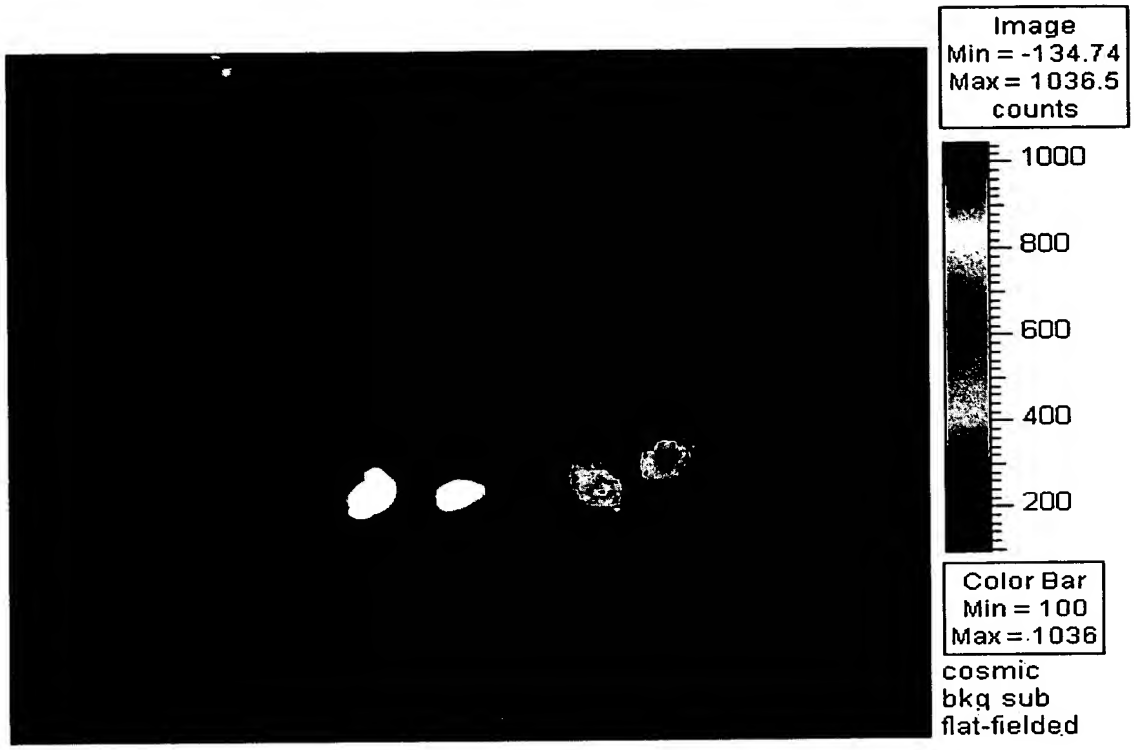
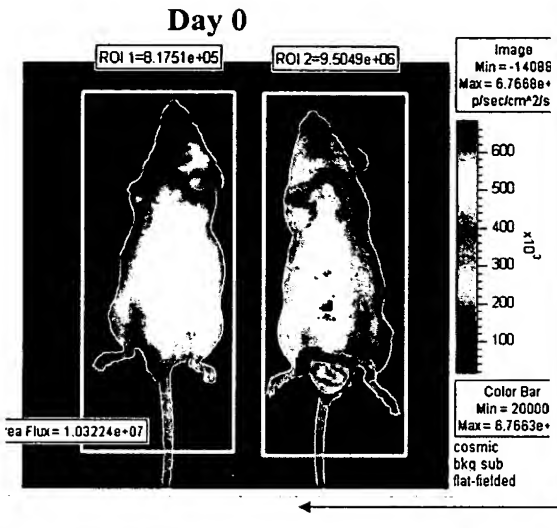


Image
Min = -134.74
Max = 1036.5
counts
1000
800
600
400
200
Color Bar
Min = 100
Max = 1036
cosmic
bkg sub
flat-fielded

FIG. 9

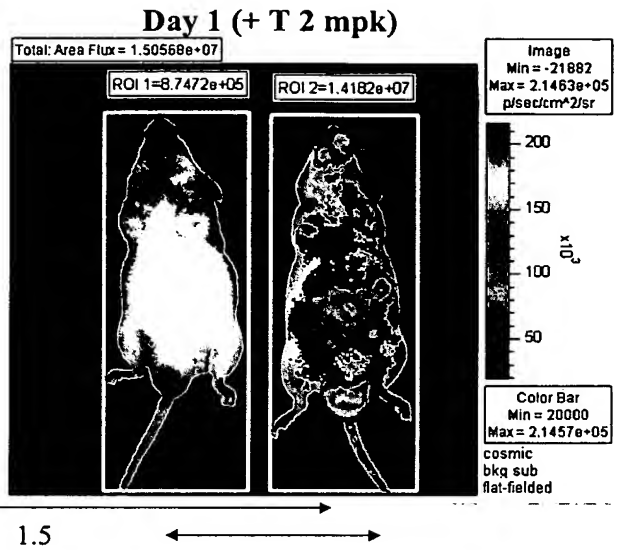
FIG. 10A



11.6

Control #456 Tg # 454

FIG. 10B

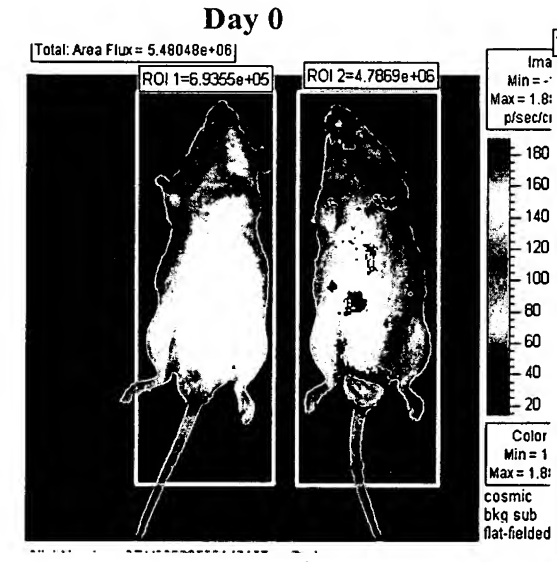


1.5

16.2

Control #456 Tg # 454

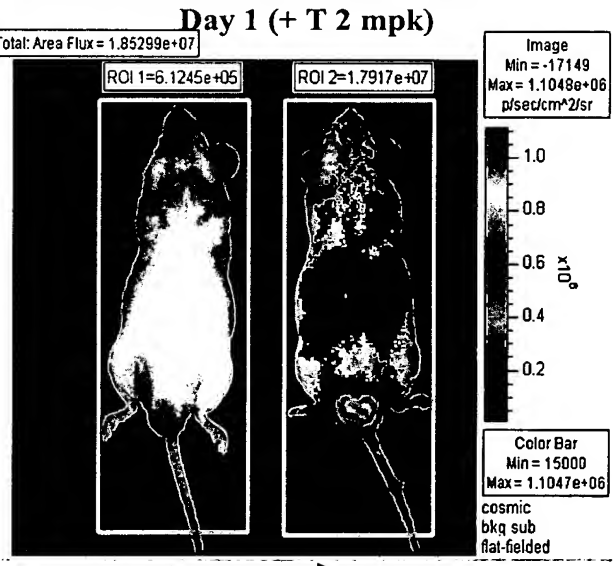
FIG. 10C



6.9

Control #457 Tg # 453

FIG. 10D



3.7

29

Control #457 Tg # 453

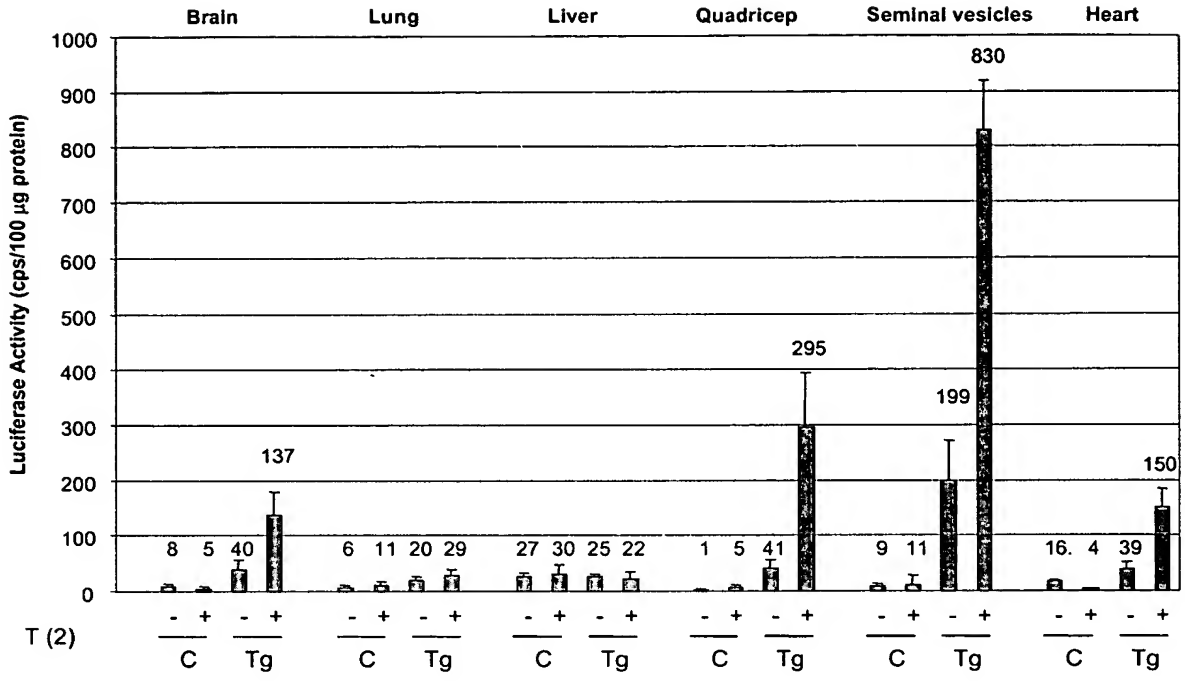

Brain
Lung
Liver
Quadricep
Seminal vesicles
Heart
Luciferase Activity (cps/100 µg protein)
1000
900
800
700
600
500
400
300
200
100
0
8 5 40 137
6 11 20 29
27 30 25 22
1 5 41 295
9 11 199 830
16. 4 39 150
T (2)
- + - +
C Tg

FIG. 11

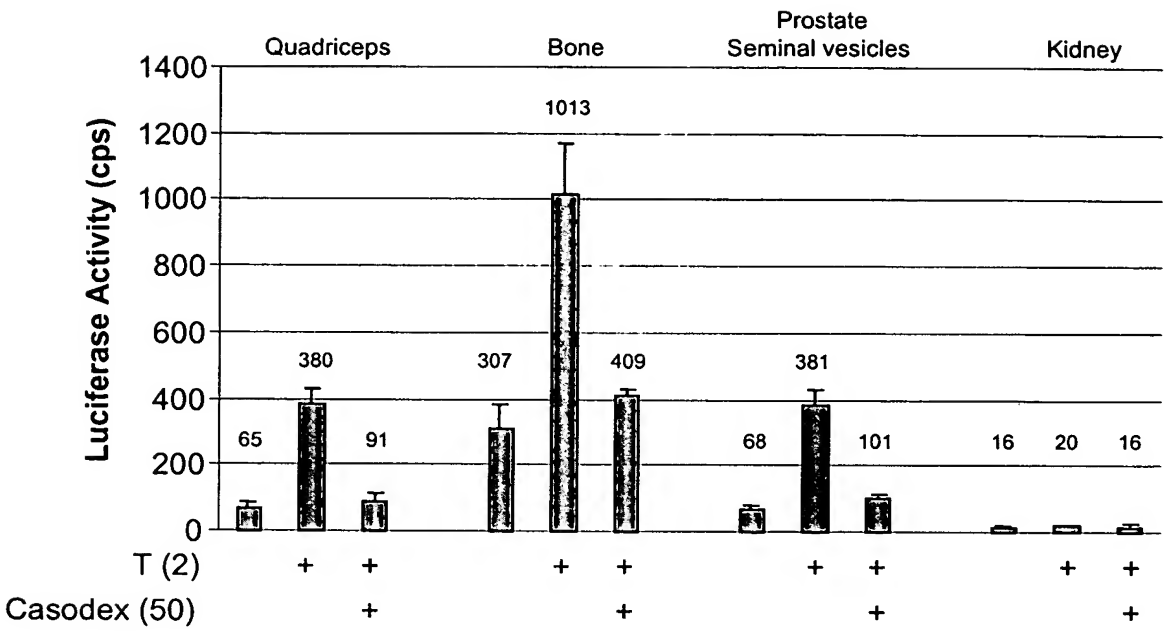

Quadriceps
Bone
Prostate
Seminal vesicles
Kidney
Luciferase Activity (cps)
1400
1200
1000
800
600
400
200
0
1013
380
307
409
381
65
91
68
101
16
20
16
T (2)
Casodex (50)

FIG. 12